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  GB 0815011 A

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GB 0615011 A GB 0507432 A GB 0482435 A GB 0479008 A GB 0425287 A GB 0387761 A

(58) Field of Search
UK CL (Edition V ) A3V
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- (54) Abstract Title A detachable shirt collar
- (57) A detachable shirt collar 21 comprises a neckband portion which is releasably engageable with a complementary neck portion 5 of a shirt 1. The neckband portion of the collar has buttonholes 26, 27 at either end, which, in use, overlap to provide a single buttonhole which engages with the top button 8a of the shirt. A further buttonhole 28 is also provided on the neckband portion which engages with a further button 8b on the shirt's neck portion, which is preferably at the back of the shirt. The collar may be fabricated from a number of materials and may include a stiffening element. A shirt and collar set comprising a shirt and a number of interchangeable collars is also described.

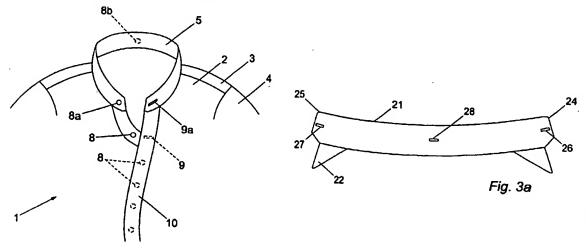


Fig. 1

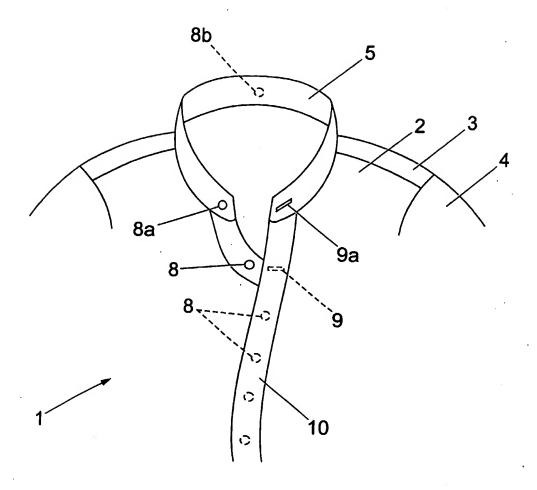
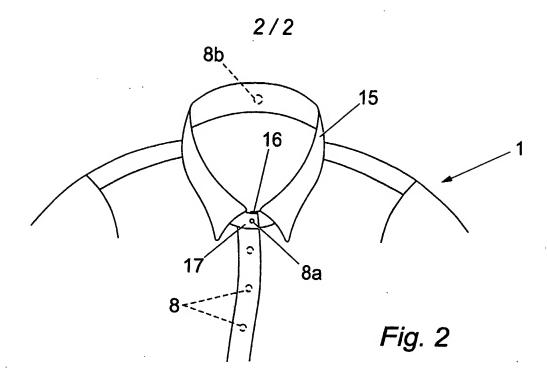
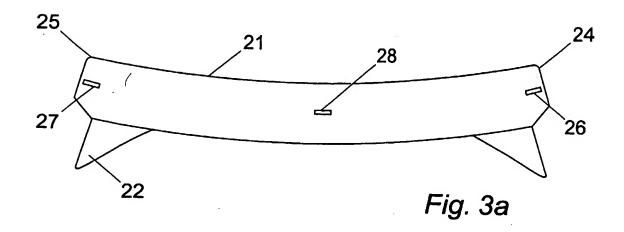


Fig. 1





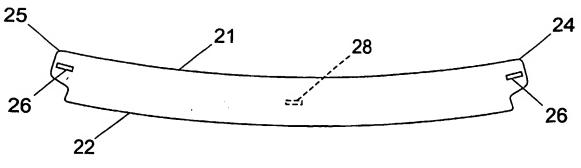


Fig. 3b

#### **SHIRT WITH COLLAR**

The invention relates to a detachable collar for a shirt and to a shirt with detachable collar, and in particular to a shirt set comprising a collarless shirt and a plurality of interchangeably attachable collars especially of different design and/or colour.

It has long been known to provide shirts with removable collars, wherein the shirt body comprises a neckband portion for releasable attachment to a complementary neckband attachment portion of a removable collar. Traditionally, particularly in an era when collars were conventionally fabricated of different, stiffer material to the body of the shirt, the collar was made removable for replacement after soiling and/or wear and/or to allow the shirt to be washed separately.

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Such removable collars are conventionally attached by provision of one or more fastening points in the form of buttonholes or other like apertures complementarily provided in the neckband portion of the collarless shirt body, and in the neckband attachment portion of the attachable collar, and in particular at the centre front thereof. The collar is then engaged to the shirt body by positioning the respective buttonholes or other apertures together and then passing a collar stud there through.

Such a procedure can be awkward, and requires that a separate stud is used,
which must be removed prior to washing and then located and inserted again
when a collar is replaced or reattached. Moreover, a traditional collar stud
passes through the whole thickness of the collar, and can consequently be
visible externally, particularly when a wing collar shirt is worn, which is not
always aesthetically desirable.

Other forms of fixing arrangements for removable collars have been proposed, for example using complimentary hook and loop pile portions to engage a neckband portion of the shirt with a complimentary neckband attachment portion of the collar, but these have often been cumbersome and complex and do not always lend themselves to easy washing and reuse.

Accordingly, it has become much more common in recent years for shirts to be provided with integrally fastened collars sewn or otherwise permanently fixed into the shirt structure at the neck, even for the most formal applications.

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It is an object of the present invention to provide a detachable shirt collar, and a shirt with detachable collar, incorporating a releasable fixing system which mitigates some or all of the above disadvantages.

It is a particular object of the invention to provide a detachable shirt collar, and a shirt with detachable collar, which offers aesthetic and practical advantages over a traditional collar stud.

It is a particular object of the present invention to provide a detachable shirt collar, and a shirt with one or more detachable collars, wherein collars are interchangeable to provide the shirt with a range of different looks.

Thus according to the invention in the first aspect there is provided a detachable collar for a collarless shirt comprising a neckband attachment portion adapted to releasably engage with a complementary neckband portion of a shirt in use, wherein the neckband portion comprises a first buttonhole generally at the centre front thereof to releasably engage upon the top button of the said shirt, and at least one secondary buttonhole to additionally engage upon a secondary button provided upon the neckband portion of the shirt laterally spaced therefrom.

In particular, a single secondary buttonhole is provided to engage upon a single such secondary button on the neckband of the shirt, which is preferably located generally oppositely from the front neck button, i.e. at the centre back of the neck.

It is a particular advantage of the attachment system of the present invention that the forward portion of the collar engages with and is retained by the top neck button on the shirt which would likely be provided in any case. Accordingly, a separate stud is not required. It has also been surprisingly found that a single further button, in particular located generally at the back of the neck, is frequently sufficient to attach the collar in stable position especially if the collar is manufactured of selected material and construction to fit around the neckband of the shirt without needing multiple retainers for shaping. Thus, only one additional button is required to adapt the shirt for use with a removable collar. The attachment system is discrete and convenient. The attachment system is integral to the shirt/collar combination and no separate studs are required. The attachment system, since it merely comprises buttons, is easily washable, and does not require removal prior to washing of the body of the shirt.

It will be apparent that to make use of the neck button of the neckband portion of the shirt as an attachment means, the attachment portion of the collar will conveniently surround and sit outside the complementary neckband portion of the shirt in use. In a particularly preferred embodiment, the attachment portion of the collar comprises an elongate portion when not so attached, which is adapted to be looped around the neckband portion of the shirt (and the neck of the wearer) for engagement, and which is provided with a buttonhole generally at either end thereof, through which the neck button of the shirt can pass to releasably secure the looped collar in position.

The collar may be fabricated of any known suitable material and to any appropriate pattern and/or design. The collar may include structural design features integral with and/or additional to the attachment portion, and may for example incorporate a conventional fold down collar design, or a wing collar design, or any other suitable collar shape. In particular, the collar may be fabricated from one or more layers of woven or non woven fabric material, optionally including further structural layers, such as stiffening layers or stiffening components, surfaces layers and/or surface treatments in familiar manner. In one embodiment, at least the attachment portion of the collar might incorporate a stiffening layer and be generally pre-shaped to a suitable shape to fit around the neckband portion of the shirt.

It is an occasional aesthetic and/or practical drawback of a conventional collar stud system that the stud must pass right through both collar and shirt at the neckband and is therefore visible externally. This can be especially undesirable with a wing collar and in relation to attachment at the back of the neck. It is a particular advantage of the present invention that this is not necessarily the case with the buttons used for the attachment system. Accordingly, in a preferred embodiment, the attachment portion comprises at least two layers of material, and at least some of the buttonholes therein do not penetrate through at least the outermost such layer. Thus, if a shirt collar attachment portion is attached to a shirt neckband button by means of a buttonhole of such design, the button is not visible in use externally on the attachment portion of the collar.

Such a buttonhole design is a particularly preferred feature in relation to the secondary buttonhole(s), and in relation to a wing-collar shirt. It is not likely to be of such importance in relation to the first, forward buttonhole, where a tie will usually be worn to obscure the button in any event. Nevertheless, for

certain applications, it would be similarly possible where the attachment portion of the collar comprises at least two layers of material for the forward buttonhole to be so adapted such that the buttonhole does not pass through at least the layer of material lying outermost in use at the forward portion of the neck, so that the forward button is similarly obscured even where a tie is not worn.

In accordance with a further aspect of the invention there is provided a shirt and collar combination, comprising a detachable shirt collar as hereinbefore described in combination with a shirt comprising a body portion and a neckband portion for complementary engagement with the neckband attachment portion of the collar, wherein the neckband portion of the shirt comprises a central neck button for releasable engagement with the primary buttonhole of the attachment portion of the collar, and at least one secondary button, and in particular a single secondary button generally at the centre back of the neck portion of the shirt, for releasable engagement with the secondary buttonhole(s) of the attachment portion of the collar.

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In accordance with this aspect of the invention, a shirt is thereby provided with a releasable collar adapted for much simpler and potentially more aesthetically pleasing attachment than is possible with a collar stud or with other prior art systems.

Typically, the shirt will be of conventional design in that a row of buttons are provided horizontally along the centre front of the shirt for dressing and undressing in usual manner, and the central neck button providing the primary engagement for the collar will then comprise the already present uppermost button of this row.

The shirt and collar may be of similar or complementary design. The shirt and collar may be of identical or different materials, depending on the desired look.

- In a particularly preferred embodiment, a shirt and collar set is provided comprising a shirt and a plurality of collars of different colour and/or design adapted to be attachable in the manner above described so as to be interchangeable to provide a variety of looks. For example, a shirt and collar set may comprise a shirt with alternatives of folded down and wing collar.

  Additionally or alternatively, a shirt and collar set may comprise a shirt with collars of different colour and/or pattern, for example a shirt with a collar of matching colour and fabric to the shirt body, and a white and/or other single colour collar as an alternative.
- Thus, in accordance with the invention in this aspect, there is offered not only an alternative to previous interchangeable collar systems which offers practical and aesthetic advantages over collar studs and other prior art fixings, but also a shirt and collar system which offers increased practical functionality by providing for a variety of alternative and readily interchangeable looks in a single convenient package.

The invention will now be described by way of example only with reference to Figures 1 to 3 of the accompanying drawings in which:

25 Figure 1 is an illustration of a shirt with neckband portion suitable for use for attachment of a collar in accordance with the first aspect of the invention, and in a shirt and collar set in accordance with the second aspect of the invention;

Figure 2 is an illustration of the shirt of Figure 1 with a fold down collar attached to the neckband thereof;

Figure 3 illustrates an alternative, wing collar for use with the shirt of Figures 1 and 2 shown unattached and viewed from front and back (3a and 3b respectively).

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In all of the Figures, features such as buttons and buttonholes which are externally visible are shown by solid lines, and the position of features such as buttons or buttonholes which would in use not be externally visible is shown for illustrative purposes by broken lines.

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Referring first to Figure 1, a shirt (1) is shown which is suitable for use with a collar in accordance with the first aspect of the invention, or to form a shirt and collar set in accordance with the second aspect of the invention. The shirt (1) comprises a body portion made up of body panel (2), shoulder yoke (3) and sleeves (4) in familiar manner, and a neckband portion (5). All are fabricated from woven fabric or other suitable material and attached together to form an integral whole in the usual way. The neckband portion (5) is the part of the shirt (1) adapted to provide engagement with a neckband portion of a suitable collar in accordance with the invention.

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The body panels (2) are joined together when the shirt is worn to close the shirt around the wearer's torso by insertion of a row of buttons (8) into a row of buttonholes (9) in entirely familiar manner. In this example, for aesthetic reasons, the buttons once connected are shown hidden by a fly flap (10) but any suitable arrangement is possible and the shirt front buttons have no bearing on the invention. The uppermost button (8a) and uppermost buttonhole (9a) are provided at the forward edges of the neckband (5), and serve to close the neckband (5) around the neck of a wearer. The button (8a) also serves in conjunction with a further button (8b) provided externally at the

rear of the neckband (5) to provide engagement with complementary buttonholes on a neckband attachment portion of the collar.

This engagement is better illustrated in Figure 2. In Figure 2 the shirt (1) of Figure 1 is shown with a collar (15) attached, and like numerals are used for like components where appropriate.

The collar (15) has an attachment portion which is looped around and over the neckband portion (5) of the shirt for attachment. The unattached free ends of the attachment portion (16, 17) thus overlap each other and lie atop the centre neck button (8a) of the neckband (5). The overlapping flaps (16, 17) are provided with buttonholes (not visible in the drawings) through which the button (8a) maybe inserted to engage the collar at the front of the shirt neckband (5). The additional button (8b) is similarly engaged through a further buttonhole (again not visible in the drawing) at the rear of the neckband portion of the collar (15), to complete securing of the collar. The collar is thus readily attached for use via integral attachment means which offer advantages of simplicity and practicality.

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In a particularly preferred embodiment, a shirt set comprises more than one collar of different design, to be interchangeable to give a variety of looks. Figure 3 illustrates an alternative wing collar design. It also illustrates in greater detail the location of the buttonholes within the collar. The collar consists of an integral collar body and neckband attachment portion (21) comprising at least two layers of suitable fabric material, and optionally comprising for example a stiffening layer in between. Wing portions (22) project from the collar body (21).

Figure 3 shows the collar opened out prior to attachment. Figure 3a shows the surface which will constitute the inner surface in use, and Figure 3b shows the

surface which will constitute the outer surface. The collar is attached by winding the collar body portion (21) around the neckband portion (5) of the shirt in like manner to that described for Figure 2. The end tabs (24, 25) thus overlap atop the top button (8a), which passes through the buttonholes (26, 27) to secure the collar in place on the neckband (5) of the shirt. The secondary button (8b) is retained in the buttonhole (28).

In this embodiment, for aesthetic reasons, the buttonhole (28) does not pass fully through all of the layers of the body/attachment portion (21), but only through the inner surface layer. In consequence the buttonhole, and the inserted button in use, will not be visible from the outer surface as is seen in Figure 3b. This improves the look of the collar and does not interfere with any tie worn over it. Such an arrangement would not generally be necessary for the forward button which would normally be covered by a tie in use, but a similar button hole could if needed be provided on the outermost surface of the flap (24, 25) designed to lie outermost in use. Similarly, such an arrangement may be provided for the buttonhole receiving the button (8b) in the collar of Figure 2, since although this would be obscured by the fold down part of the collar it is still advantageous as the button might otherwise interfere with a tie being worn.

Thus, alternative collars are provided so that the shirt and collar set provides multiple functionality, being usable with a wing collar or with a regular collar. In alternative sets, multiple collars could be provided of otherwise different shapes, of different colour or pattern or the like.

## **CLAIMS**

1. A detachable collar for a collarless shirt comprising a neckband attachment portion adapted to releasably engage with a complementary neckband portion of a shirt in use, wherein the neckband portion comprises a first buttonhole generally at the centre front thereof to releasably engage upon the top button of the said shirt, and at least one secondary buttonhole to additionally engage upon a secondary button provided upon the neckband portion of the shirt laterally spaced therefrom.

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- 2. A collar in accordance with Claim 1 wherein a single secondary button hole is provided to engage upon a single such secondary button on the neckband of the shirt.
- 15 3. A collar in accordance with Claim 2 wherein the single secondary button is located generally oppositely from the front neck button at the centre back of the neck.
- 4. A collar in accordance with any preceding claim wherein the attachment portion of the collar comprises an elongate portion when not so attached, which is adapted to be looped around the neckband portion of the shirt for engagement, and which is provided with a buttonhole generally at either end thereof, through which the neck button of the shirt can pass to releasably secure the looped collar in position.

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5. A collar in accordance with Claim 4 wherein the attachment portion comprises at least two layers of material, and at least some of the button holes therein do not penetrate through at least the outermost such layer.

- 6. A collar in accordance with any preceding claim wherein at least the attachment portion incorporates a stiffening layer such as to be generally free-shaped to a suitable shape to fit around the neckband portion of a shirt in use.
- A shirt and collar combination, comprising at least one detachable shirt collar in accordance with any preceding claim in combination with a shirt comprising a body portion and a neckband portion for complementary engagement with the neckband attachment portion of the collar, wherein the neckband portion of the shirt comprises a central neck button for releasable engagement with the primary buttonhole of the attachment portion of the collar, and at least one secondary button, and in particular a single secondary button generally at the centre back of the neck portion of the shirt, for releasable engagement with the secondary buttonhole(s) of the attachment portion of the collar.

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8. A shirt and collar combination in accordance with Claim 7, wherein the shirt is provided with a row of buttons horizontally along the centre front thereof, the uppermost button of this row providing the central neck button for primary engagement of the collar.

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- 9. A shirt and collar combination in accordance with Claim 7 or Claim 8 comprising a plurality of collars of different colours and/or design adapted to be attachable so as to be interchangeable to provide a variety of looks.
- 25 10. A collar or shirt and collar combination as hereinbefore described with particular reference to the accompanying drawings.







Application No: Claims searched:

GB 0209580.0

All

**Examiner:** 

James Hull

Date of search:

24 April 2003

# Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance	
х	1 to 5, 7 to 9	GB 387761 A	FAULKNER. See page 2 lines 3 to 7 and Figure 3. Detachable collar with hidden buttonhole.
X	1 to 4, 6 to 9	GB 482435 A	SHEPHERD. See Figures and page 1, lines 15 to 21. A removable collar with stiffener.
X	1 to 4, 7 to 9	GB 479008 A	MUIR. See Figures.
x	1 to 4, 7 to 9	GB 615011 A	RAND. See Figures.
x	1 to 4, 7 to 9	GB 507432 A	JOHN DICKINSON & CO. See Figures.
Х	1 to 4, 7 to 9	GB 425287 A	HENGSTLER See Figures.

### Categories:

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 Document published on or after the declared priority date but before the filing date of this invention.
 Patent document published on or after, but with priority date earlier than, the filing date of this application.

#### Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKCV:

A<sub>3</sub>V

Worldwide search of patent documents classified in the following areas of the IPC7:

**A41B** 

The following online and other databases have been used in the preparation of this search report:

WPI, EPODOC, JAPIO, EPODOC, JAPIO